

Proposal to Protect, Enhance, and Sustain the Unique Cultural, Historical, Recreational, Agricultural and Economic Values of the Sacramento-San Joaquin Delta as an Evolving Place

January 26, 2012

Delta Protection Commission

Introduction

This proposal by the Delta Protection Commission (“the Commission”) staff has been developed for consideration and incorporation into the Delta Plan by the Delta Stewardship Council (DSC) as specified in Section 85301 of the Delta Reform Act of 2009 (SB X7 1, Steinberg). It is based on the recommendations contained in the Economic Sustainability Plan (ESP) for the Sacramento-San Joaquin Delta. It consists of several proposals arranged under eight themes critical to the Delta’s economic sustainability and consistent with the co-equal goals:

- 1) Levees and Public Safety
- 2) General Economic Sustainability
- 3) Economic Sustainability of Agriculture
- 4) Economic Sustainability of Recreation and Tourism
- 5) Infrastructure
- 6) Habitat and Ecosystem Improvements
- 7) Water Supply Reliability
- 8) Research and Monitoring

Tables 1 to 8 detail the specific recommendations under each theme, and provide references to detailed discussion in the ESP, including discussions of feasibility and consistency with the co-equal goals. The ESP is an extensively researched, peer-reviewed document, developed in a transparent manner through several public drafts and extensive stakeholder feedback. Among the many sources considered by the ESP are the California Department of Parks and Recreation’s *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* and the California Department of Food and Agriculture’s *Evaluation of Policy Alternatives to Benefit Agriculture in the Sacramento-San Joaquin Delta of California*. Also, included herein is a study for establishing state designation of the Delta as a place of special significance and detailed recommendation for the administration of the Delta Investment Fund created by Section 29778.5 of the Public Resources Code.

Section 85301 of the Delta Reform Act of 2009 specifically calls for the proposal to address the National Heritage Area, the Delta Investment Fund, and to evaluate whether the recommendations of the ESP are feasible and consistent with the co-equal goals. While significant discussion is in the reports themselves, as noted in the tables below, the following sections briefly highlights some key considerations in this area.

The National Heritage Area and Delta Investment Fund

The Commission has conducted a feasibility study for a National Heritage Area (NHA). The report, upon adoption by the Commission, is to be submitted to Congress for designation as an NHA and is attached as Appendix A for reference.

The ESP discusses the Delta Investment Fund, and lays out strategic plans to guide its use in chapters on Delta recreation and tourism (Chapter 8) and the economic sustainability of Legacy Communities (Chapter 10). Chapter 11 of the ESP describes in detail an economic development facilitator organization, and the ESP consultants recommended that the role be taken on either by joint powers authority of county governments or a sub-committee of the Commission. This proposal builds upon the recommendations of the ESP and the ESP

consultants to recommend that a sub-committee of the Commission as economic development facilitator organization is most feasible and consistent with the Delta Reform Act.

The Delta Reform Act created the Delta Investment Fund, Water Code Section 29778.5. Funds shall be available on appropriation by the Legislature to the Commission for the implementation of the regional economic sustainability plan, developed pursuant to Section 29759 for the purposes of enhancing Delta communities. The Delta Investment Fund may receive funds from federal, state, local and private sectors.

Currently, the Delta Investment Fund is not funded; the following proposal is a template for administration of the Delta Investment Fund.

The ESP for the Delta proposes actions to protect enhance and sustain the unique cultural, historical, recreation, agricultural and economic values of the Delta as an evolving place consistent with the coequal goals. Investing in the Delta as an evolving place includes investing in the continued socioeconomic sustainability of agriculture and its infrastructure and legacy communities of the Delta. In addition, seeking a NHA Designation will further define the Delta as a place.

The Delta Investment Fund should be used to focus on furthering the development of the Delta as a place; supporting agritourism, preserving unique cultural sites within and in the immediate surroundings of legacy communities, and supporting infrastructure that encourages destination visits to the Delta. All of this is consistent with the designation of the Delta as a NHA. Designation of the Delta as an NHA can attract matching federal funds for investing in cultural building preservation, recreational amenities that expand recreation opportunities, and infrastructure to improve access to the NHA sites and attractions. The Delta Investment Fund can be a source to attract matching federal funds.

Local participation is essential for the success of the Delta Investment Fund. This is important to prioritize projects and have public support to ensure success and also to be a potential attraction for funds from state, local and private sources.

The Commission, as administrator of the Delta Investment Fund, will seek counsel and act upon recommendations from an Investment Committee established by the Commission. The Committee shall be composed of the four state representatives from the Commission, or their designee, and each in-Delta representative on the Commission shall propose a person from their respective constituency to serve on the committee. The terms shall be for no more than 4 years, however individuals may be reappointed. Initial terms shall be staggered by lottery, with 25% of the committee serving for one year, 25% for two years, 25% for three years and 25% for four years. The committee will be charged with developing a strategic plan for guiding its actions in evaluating, prioritizing and funding projects based on the strategies in the ESP. The committee shall also have the charge to conduct outreach to source funding for the Delta Investment Fund. The committee shall meet quarterly, or more often as necessary, report quarterly to the Commission and report annually as part of the Commission's annual report to the Governor and the Legislature.

The Commission shall retain the ability to modify the Investment Committee structure as needed.

Feasibility and Consistency with the Co-Equal Goals

As discussed in Chapter 11 of the ESP, the ESP is consistent with the co-equal goals as stated in the Delta Reform Act of 2009: “[T]he two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place” (Water Code Section 85054). Water supply reliability will be greatly enhanced through a seismically resilient levee system that also protects water supply reliability for in-Delta water users. Extensive ecosystem improvements are recommended in the ESP including the planting of vegetation on the water side of widened levees in order to provide interconnected habitats throughout the Delta.

The ESP explains that the extensive levee upgrades recommended in the ESP are financially feasible, and have notably higher economic benefit to cost ratios than other proposals for improving water supply reliability. This is due to both lower costs and the fact that levee improvements create enormous economic benefits beyond water supply such as the protection of critical energy and transportation infrastructure, as well as the Delta agriculture and recreation economy. In addition to the ESP, the Department of Water Resources’ Delta Risk Management Strategy (DRMS) Phase 2 study also found that improving levees to the PL 84-99 standard had the highest benefit-cost ratio, and lowest total costs of any other alternatives considered, including isolated conveyance. The preliminary draft of DRMS Phase 2 considered seismic upgrades to Delta levees similar to the ESP, and also found that a scenario based on seismic levee upgrades had the highest risk reduction benefits and lowest costs of all analyzed alternatives. Finally, it is important to note, as identified in the ESP, that there are significant existing bond funds available for Delta levees. Delta Vision estimated \$750 million were specifically targeted for Delta levees by Proposition 84 and 1E and the vast majority of these funds have yet to be appropriated for work on Delta levees. While insufficient to achieve the full levee upgrade vision of the ESP, it is important to note that no other large element of the Delta plans already has funding of this significance already in place. The ESP recommends, in parallel to a similar proposal in the draft Delta Plan, a beneficiary pays assessment mechanism that can develop additional funds for Delta levees in order to leverage existing funds for upgrades.

Habitat recommendations address the objective of preserving and enhancing the Delta as an evolving place as well as ecosystem restoration. The major difference between the ESP and the BDCP with respect to habitat is a large decrease in the extent of tidal marsh habitat in the Delta. Tidal marsh is by far the most costly habitat element in the BDCP, and has among the most uncertain environmental benefits. The BDCP draft cost estimates of the tidal marsh element are nearly \$2 billion, over half of total BDCP habitat development costs. This cost does not include the negative economic impacts on the Delta, and tidal marsh also has by far the highest negative economic impact on the Delta of any habitat proposals identified in the ESP. Thus, the ESP greatly reduces the cost and feasibility of improving the Delta environment, while including the most effective elements of environmental restoration.

Table 1 Proposals on Levees and Public Safety

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
1.1	Improve and maintain all non-project levees to at least the Delta-specific PL 84-99 standard.	This engineering standard has been developed and supported by numerous studies and should remain the basic standard for non-project levees. These improvements are attainable and have economic benefits that exceed their cost, particularly when considered in the context of the systemic value of multiple infrastructure systems protected by the levee system. Achieving this goal will increase water supply reliability, will contribute to maintaining and improving water quality and will leverage the substantial benefit of federal support through USACE in the event of levee failures. Project levees should also be improved as necessary and maintained to a similar standard.	Chapter 5: Sections 5.3.2; 5.4.6; 5.5; 5.6 (3) Chapter 11: Section 11.2
1.2	Improve most “lowland” levees and selected other levees to a higher Delta-specific standard that more fully addresses the risks due to earthquakes, extreme floods, and sea-level rise, allows for improved flood fighting and emergency response, provides improved protection for legacy communities, and allows for growth of vegetation on the water side of levees to improve habitat.	Improvement of most Delta lowland levees and selected other levees to this higher standard would cost \$1 to \$2 billion in base construction costs over the cost of reaching the PL 84-99 standard. Including vegetation and habitat enhancement, total program costs might be in the order of \$4 billion, similar to the cost projected by the PPIC (2007) in their “Fortress Delta” alternative. While this is a longer-term program, planning should be initiated immediately.	Chapter 5: Sections 5.3.2; 5.3.3.3; 5.4.6; 5.5; 5.6 (4) Chapter 11: Section 11.5
1.3	The Delta Levee Subventions and Special Projects Program should continue to be supported.	These successful programs have significantly improved the performance of Delta levees in recent decades.	Chapter 5: Section 5.5
1.4	Transfer to a regional agency with fee assessment authority on levee beneficiaries responsibility for allocating funds for the longer-term improvement of Delta levees and the maintenance of regional emergency preparedness, response, and recovery systems developed jointly with the Delta counties and state and federal governments.	The Delta Stewardship Council has proposed the creation of a new agency, the Delta Flood Risk Management Assessment District, with fee assessment authority on levee beneficiaries including some beneficiaries that are not currently assessed for levee maintenance and improvement. In accordance with California Constitution Article XIII D sections 3 and 4, specific benefit assessment authority and approval must be in place before funding can be assured. Whatever agency is given these powers by the legislature should also be the vehicle for distributing any additional funds that are provided by the state and federal governments for levee investments. Formation of a new agency such as a JPA consisting of the five Delta counties, or adoption of these responsibilities by an existing regional agency should have no impact on any existing liabilities associated with levee failures. This regional agency should place much more emphasis on preventative maintenance and inspections and the maintenance of flood fighting and emergency response systems developed by district, county, state, and	Chapter 5: Sections 5.4.2; 5.4.5; 5.5

		federal emergency officials. Such flood fighting and emergency response systems should aim, first, at preventing breaches and, second, at minimizing flooding impact on people, property, and critical infrastructure in the event of a breach. This agency would necessarily work in close cooperation with the special districts, county, state, and federal officials responsible for emergency response in the Delta to develop the emergency response systems. The agency would then help maintain these systems on behalf of, and in cooperation with, those jurisdictions. This agency may have an actual response function in a flood emergency as agreed upon jointly by county, state, and federal officials. This agency, in accordance with regional response plans would closely coordinate with the Department of Water Resources and the Bureau of Reclamation following single or multiple levee breaches as these organizations would continue to control water conveyance and upstream reservoir operations.	
1.5	In addition to providing funding for longer-term levee improvements, provide ongoing funding for regular levee maintenance and expanded emergency preparedness, response, and recovery	This sum should cover nonproject and project levees as defined in Water Code sections 12980(e) and (f). The division of this funding between regular physical maintenance of the levee system and emergency preparedness, response, and recovery should be determined by the regional agency that assumes responsibility for both these activities. A portion of these funds should be set aside each year for dealing with emergencies when they occur. Such annual funding should be in addition to an initial emergency fund contribution.	Chapter 5: Sections 5.4; 5.5; 5.6 (7-10)
1.6	Reduce or eliminate regulatory impediments to action by the creation of a one-stop permitting system for selected activities within the Delta including dredging, levee construction, and ecosystem restoration.	Regulatory impediments add significant cost to these activities. Coordination among regulating agencies in the permitting of channel maintenance, levee construction and ecosystem restoration that reduces or eliminates impediments will allow more efficient and timely improvements improving economic sustainability and public safety	Chapter 5: Section 5.5 Appendix D
1.7	Fully and expeditiously implement the recommendations contained in the SB27 Sacramento-San Joaquin Delta Multi-Hazard Coordination Task Force report.	This report was prepared by emergency managers of the five Delta counties, the Department of Water Resources, the California Emergency Management Agency, and the Delta Protection Commission and is due to be forwarded to the Governor and legislature in early 2012. The report is complemented by an earlier white paper prepared jointly in 2008 by the emergency managers of the five Delta counties entitled, "Basis for Regional Flood Response Planning". These reports provide specific, and in many cases proven, actions that would improve emergency response efficiency and effectiveness in the Delta.	Chapter 5: Sections 5.4; 5.6 (8)
1.8	Formally identify the Delta region as the geographic basis for integrated response, mutual aid, decision making, and information sharing processes during major floods.	Floods occur within hydrological basins and it is the jurisdictions within a common hydrological basin that are interdependent and must work together to reduce the overall impact. The current SEMS structure overlaid on the Delta region divides it into five operational areas (counties and their independent cities and reclamation districts), two different mutual aid regions, and other legal and administrative "boundaries". Given the critical nature of the Delta to the state, this region should be designated as a distinct region for integrated emergency operations during floods in order to improve local response effectiveness and facilitate the creation of regional response systems.	Chapter 5: Sections 5.4; 5.6 (7)

Table 2 General Proposals for Economic Sustainability

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
2.1	Designate a regional agency to implement and facilitate economic development efforts.	Several of the analysis chapters, particularly the recreation and tourism analysis and legacy community chapter, identified a cross-cutting need for a regional organization to strategically organize and facilitate economic development activities. The task to facilitate economic development strategies should be placed, for example, within the Delta Protection Commission or a joint powers authority (JPA) led by local governments. The main tasks of this entity are: marketing and branding, permitting and regulatory assistance, planning and coordination with counties and cities, and strategically managing the Delta Investment Fund.	Chapter 8: Sections 8.4.3; 8.6.2; 8.6.3; 8.6.5 Chapter 9: Section 9.3.5 Chapter 10: Section 10.1.4 Chapter 11: Section 11.1
2.2	Economic impacts of habitat creation and development of facilities for export water supply should be fully mitigated.	Local governments already face challenges delivering adequate public services to the rural Delta, and habitat development and other strategies could increase demand on local services while reducing the local tax base. Compensation for property taxes, assessments, and payments to property owners are essential parts of mitigation, but do not mitigate socio-economic impacts including lost income and sales in related industries and their associated tax revenues. Measuring and effectively compensating communities for dispersed and indirect net economic impacts should be further explored.	Chapter 7: Section 7.6 Chapter 8: Sections 8.5.1.5; 8.5.1.6; 8.5.2.1 Chapter 9: Sections 9.3.5; 9.5.3
2.3	Land use planning and regulation must be clear and consistent across agencies.	The “covered action” component of the Delta Plan introduces a new element to land use planning that poses to reduce local control and could increase uncertainty and risk to prospective investors. Increasing complexity of the Delta regulatory environment puts the Delta economy at a competitive disadvantage for new investment and will limit the ability of the Delta economy to evolve and be sustainable in a changing environment. It is vitally important that permitting, planning and regulation be streamlined, consistent, and coordinated across agencies.	Chapter 7: Section 7.6.4 Chapter 8: Sections 8.5.1.5; 8.6.1 Chapter 9: Section 9.3.5 Chapter 10: Sections 10.2; 10.3; 10.4

Table 3 Proposals for the Economic Sustainability of Agriculture

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
3.1	Maintain and enhance the value of Delta agriculture	This goal is aligned with the performance measure in the Delta Stewardship Council's Fifth Draft of the Delta Plan, and can be attained in a way that is consistent with the state's coequal goals. The potential of other industries to replace any loss in economic output from Delta agriculture is limited.	Chapter 7: Section 7.3 Chapter 11: Section 11.3
3.2	Limit the loss of productive farmland to urbanization, habitat, and flooding to the greatest practical extent	Some loss of farm land to these factors is inevitable, but continuing shifts of Delta agriculture to higher-valued crops and more value-added activities will compensate if land loss is not too great. To facilitate this goal, future residential development must be limited to the extent of city limits, city spheres of influence in the secondary zone, and unincorporated areas that are consistent with city and county general plans. In addition, habitat measures must target existing public lands, lower-value agricultural lands, encourage habitat friendly agriculture and consider adjusting acreage goals as discussed in the habitat recommendations.	Chapter 7: Section 7.6.2 Chapter 8: Section 8.5.1.3
3.3	Protect Delta water quality and water supplies for agriculture	Increasing salinity levels and interference with water supply and flow—whether through changes to standards, changes in conveyance, or tidal habitat development—will harm Delta agriculture production and impact export water quality.	Chapter 7: Section 7.6.1 Appendix G
3.4	Support growth in agritourism	Agritourism is currently a very small contributor to the Delta's agricultural value, but is fast growing. Most agritourism is currently in the Secondary Zone close to urban areas, but could also be further developed in and around Legacy Communities and focal point recreation areas. Local area plans should support agritourism which is consistent with development of the Delta as a place.	Chapter 7: Section 7.4 Chapter 8: Sections 8.4.2.1; 8.4.2.7; 8.4.2.10; 8.4.6; 8.6.6; Chapter 10: Sections 10.1.1; 10.5.2; 10.5.5 Chapter 11: Section 11.3
3.5	Support local value-added processing of Delta crops.	Yolo County's agricultural and industrial zone that facilitated local expansion of the successful Bogle Winery is an example of a successful strategy. In addition to local governments, regulations from state and federal agencies that inhibit investment in value-added processing should be examined and streamlined where possible, this will contribute to agritourism. This could be a role for the regional economic development entity described in Section 2. Besides the growth in wineries, this strategy can be applied to other emerging sectors such as olive pressing.	Chapter 7: Section 7.3.2 Chapter 10: Sections 10.1.3; 10.5.2 Chapter 11: Section 11.1

Table 4 Proposals for the Economic Sustainability of Recreation and Tourism

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
4.1	Protect and enhance private enterprise-based recreation with support from state and local public agencies.	Most of the economic activity related to recreation is generated by private enterprise. Public agencies can provide catalyst settings, recreation facilities, streamline permitting, and infrastructure to improve access, enhance and create settings for private development, and services.	Chapter 8: Sections 8.3.6; 8.4.3; 8.4.5.1; 8.4.5.3; 8.4.5.4; 8.6.2; 8.6.6
4.2	Focus recreation development in five location-based concepts: 1) Enhance Delta Waterways 2) Develop Dispersed Points of Interest and Activity Areas 3) Create Focal Point Destination Complexes with natural areas, parks, Legacy Communities, marinas, historic features, and trails 4) Expand public access to Natural Habitat Areas 5) Create recreation-oriented buffers at Delta urban edges		Chapter 8: Sections 8.4.5; 8.6
4.3	Implement Economic Sustainability Plan through specific strategies.	Recommended strategies include consistency planning and regulation refinement, coordination among state and local agencies, obtaining strategic levee protection for legacy communities and key recreation areas, designating a marketing and economic development facilitator, and providing key funding for catalyst projects and agencies.	Chapter 8: Section 8.6

Table 5 Proposals for Infrastructure

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
5.1	Planning of levee investments must fully consider the economic value of infrastructure services along with all other benefits	Comparisons of levee costs to farmland values substantially understate the value and importance of the levee system. Increased levee investment is needed to sustain critical energy, transportation, and water supply infrastructure. The Delta system of levees not only protects in Delta infrastructure and farmland but also provides flood protection to the urban periphery of the Delta.	Chapter 9: Sections 9.3; 9.4; 9.5 Chapter 11: Sections 11.2; 11.5
5.2	All owners, operators of infrastructure and those beneficiaries that depend on Delta levees must contribute to levee system investment and maintenance.	Some infrastructure systems make little or no financial contribution to sustaining Delta levees. All infrastructure services, including transportation, energy, and through-Delta conveyance of water must support levee investment.	Chapter 11: Sections 11.2; 11.5 Chapter 5: Sections 5.3.3.3; 5.4.6; 5.5
5.3	Protect and improve Delta water quality and supply for agricultural, municipal and industrial uses.	Both salts and organic carbon significantly increase costs for farms, households, business and industry, in and outside the Delta.	Chapter 9: Sections 9.5 Chapter 7: Section 7.6.1 Chapter 8: Section 8.4.1.6
5.4	Ensure that future development of infrastructure in the Delta is aligned with economic sustainability strategies.	Infrastructure demands within and around the Delta will require significant future investment. For example, investment in Delta roads and highways should be integrated with strategies to enhance agriculture, recreation, Legacy Communities, and emergency preparedness in the Delta, as well as minimize conflicts between uses. This could be a role for the Regional Economic Development Entity.	Chapter 9: Sections 9.3; 9.4; 9.5 Box 2 Chapter 11: Section 11.1
5.5	Support expansion and development of the ports.	The Marine Highway Corridor initiative offers significant environmental and infrastructure benefits for the greater Northern California Region, and is catalyzing economic development around Stockton, West Sacramento, and the state. More generally, development of these ports and marine facilities in the Pittsburg, Antioch, and Collinsville areas will support greater inter-regional integration, competitiveness, and economic development in the state.	Chapter 9: Section 9.3.3 Box 4

Table 6 Proposals for Habitat and Ecosystem Improvements

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
6.1	Emphasize strategies with little or no conflict with the Delta economy.	Examples include increased fresh water flows, growth of vegetation on enlarged levees, restoration of mid-channel berms, reactivation of upstream floodplains and the promotion of habitat friendly agriculture.	Chapter 3 Chapter 6: Section 6.3; Chapter 7: Section 7.6.2; Chapter 8: Section 8.5.1.6; Chapter 9: Sections 9.3.5, 9.4.5, 9.5.3
6.2	Expanded and enhanced flood bypasses can be consistent with economic sustainability if agencies work with local stakeholders to minimize and mitigate economic impacts.	Enhancing flood bypasses benefits fish and flood control, but can significantly impact agricultural production. The proposal to expand and enhance the Paradise Cut bypass in the South Delta is an example of an effective compromise between environmental groups and local landowners, and should be implemented.	Chapter 7: Sections 7.6.2.1; 7.6.2.3 Chapter 8: Section 8.5.1.3 Chapter 9: Sections 9.3.5; 9.4.5; 9.5.3
6.3	Tidal marsh habitat plans should be significantly reduced.	Conversion of agricultural land to tidal marsh habitat creates significant economic, health, and water supply concerns with uncertain benefits for fish species. Tidal marsh would take high-value agricultural land out of production, negatively impact water quality for in-Delta and out-of-Delta users, increase seepage risks for nearby levees and lands, potentially increase water use, and create mosquito and vector control problems. Any tidal marsh habitat plans should be developed in cooperation with local stakeholders.	Chapter 7: Section 7.6.2.4 Chapter 8: Sections 8.5.1.3; 8.5.2.1 Chapter 9: Sections 9.3.5; 9.4.5; 9.5.3
6.4	Increased open-water habitat in the Delta is not recommended.	Flooded islands in the Delta would create similar problems to tidal marsh, increase wave and seepage forces on adjacent islands and levees, and could have other significant negative effects on recreational boating and existing marinas and recreational facilities. The ecosystem benefits of open water are uncertain and should be studied further.	Chapter 7: Section 7.6.3 Chapter 8: Sections 8.5.1.6; 8.5.2.1 Chapter 9: Sections 9.3.5; 9.4.5; 9.5.3
6.5	Include recreation facility development in habitat enhancement plans when possible.	Habitat restoration plans should be aware of the recreation and tourism enhancement strategy and look for co-development opportunities.	Chapter 8: Sections 8.4.5.2, 8.4.5.5, 8.5.1.3, 8.5.1.6, 8.5.2.2
6.6	Habitat restoration should start on state-owned land and only occur on private lands with willing sellers consistent with local land use plans.	While willing sellers of habitat and easements are essential, it is important to note that compensating owners of land does not mitigate the socio-economic impacts of taking farm land out of production for habitat. In most cases, the loss in employee, supplier, and processor income in addition to other community spillover effects significantly exceeds the loss in farm income that is compensated through a voluntary sale.	Chapter 7: Section 7.6.2.2

Table 7 Proposals for Water Supply Reliability

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
7.1	Continuing the through-Delta conveyance is important to economic sustainability in the Delta and can be consistent with water supply reliability within and outside the Delta.	The substantial levee investments recommended in the ESP will substantially increase the reliability of through-Delta conveyance at a much lower cost than isolated conveyance.	Chapter 5: Sections 5.3.3.3; 5.4.1; 5.4.6 Chapter 6: Section 6.4
7.2	A dual conveyance plan with a large, 15,000 cfs isolated conveyance facility has large conflicts with Delta economic sustainability and has high risk for Delta stakeholders.	Even if water quality standards were maintained, a large facility would have significant agricultural impacts, as well as negative quality of life and tourism impacts. The biggest long-term problem with isolated conveyance is the risk of lower water quality to maximize the value of the large facility to the exporters paying for the facility, and a reduced commitment to levee investment and maintenance by the state and water exporters that puts the Delta economy and other regional infrastructure at greater risk.	Chapter 7: Section 7.6.1.3 Chapter 8: Sections 8.5.1.2; 8.5.1.6; 8.5.2.1 Chapter 9: Sections 9.4.5; 9.5.3 Boxes 5 & 6 Chapter 11: Section 11.3
7.3	Options to large isolated conveyance must be fully and consistently evaluated.	In addition to through-Delta conveyance with the large levee upgrades, maintenance, and emergency measures recommended in this plan, these options include, but are not limited to a smaller-capacity isolated conveyance, the Delta Corridors plan, and proposals to move export intakes to the Western Delta in conjunction with additional south of Delta storage.	Chapter 8: Section 8.4.5.2 Chapter 9: Sections 9.5.1; 9.5.2 Chapter 11: Sections 11.4; 11.5

Table 8 Proposals on Research and Monitoring

Proposal No.	Proposal Title	Description	ESP References for Feasibility and Consistency
8.1	Conduct a comprehensive and credible cost-benefit analysis to analyze Delta alternatives.	This mirrors a recommendation the independent review panel for the ESP made to the Stewardship Council. Supporting such an analysis would be consistent with supporting the best available science to guide Delta decision making.	Chapter 11: Section 11.5
8.2	New recreation data is needed and should be updated regularly.	A key first step is to improve data on recreation and tourism use with an updated visitor survey and additional primary data collection that is repeated on five-year intervals. This data is crucial for future recreation planning and marketing, and could inform ecosystem restoration plans.	Chapter 8: Sections 8.3.4.3; 8.3.4.4; 8.3.4.5
8.3	Maintain an Economic Sustainability Scoreboard to track progress.	Agricultural and recreational data should be consistently collected and compiled over time. Indicators for infrastructure, other economic sectors, and socio-economic status should also be developed and tracked to inform implementation of the plan.	Chapter 2: Section 2.3.1 Chapter 5: Section 5.3 Chapter 7: Section 7.2 Chapter 8: Section 8.3 Chapter 9: Sections 9.3.1-9.3.4; 9.4.1-9.4.4; 9.5.1 & 9.5.2 Chapter 10: Section 10.2 Appendix B
8.4	The Delta Science Program should sponsor more engineering and economic studies in addition to ecological research.	Information gaps surrounding Delta levees, local economic impacts, and valuation of benefits, and costs of ecosystem restoration hinder Delta decision making and should be a higher priority for scientific research funding.	Chapter 2: Section 2.3.1 Chapter 5: Sections 5.3 Chapter 7: Section 7.2 Chapter 8: Section 8.3 Chapter 9: Sections 9.3.1-9.3.4; 9.4.1-9.4.4; 9.5.1 & 9.5.2 Chapter 10: Section 10.2
8.5	Increase alignment among the various research and planning initiatives.	Updates of the Delta Plan should consider periodic updates of the Economic Sustainability Plan.	Chapter 4: Section 4.3.4 Chapter 5: Sections 5.5 & 5.6 Chapter 6: Section 6.5 Chapter 7: Section 7.6.4 Chapter 8: Sections 8.5.1.5; 8.5.1.6; 8.5.2.1 Chapter 9: Sections 9.3.5; 9.4.5; 9.5.3 Chapter 10: Section 10.3.2.2

Acronyms & Abbreviations

BDCP	Bay Delta Conservation Plan
Cfs	Cubic Feet per Second
DRMS	Delta Risk Management Strategy
DSC	Delta Stewardship Council
ESP	Economic Sustainability Plan
JPA	Joint-Powers Authority
NHA	National Heritage Area
PL	Public Law
PPIC	Public Policy Institute of California
SEMS	Standardized Emergency Management System
USACE	U.S. Army Corps of Engineers